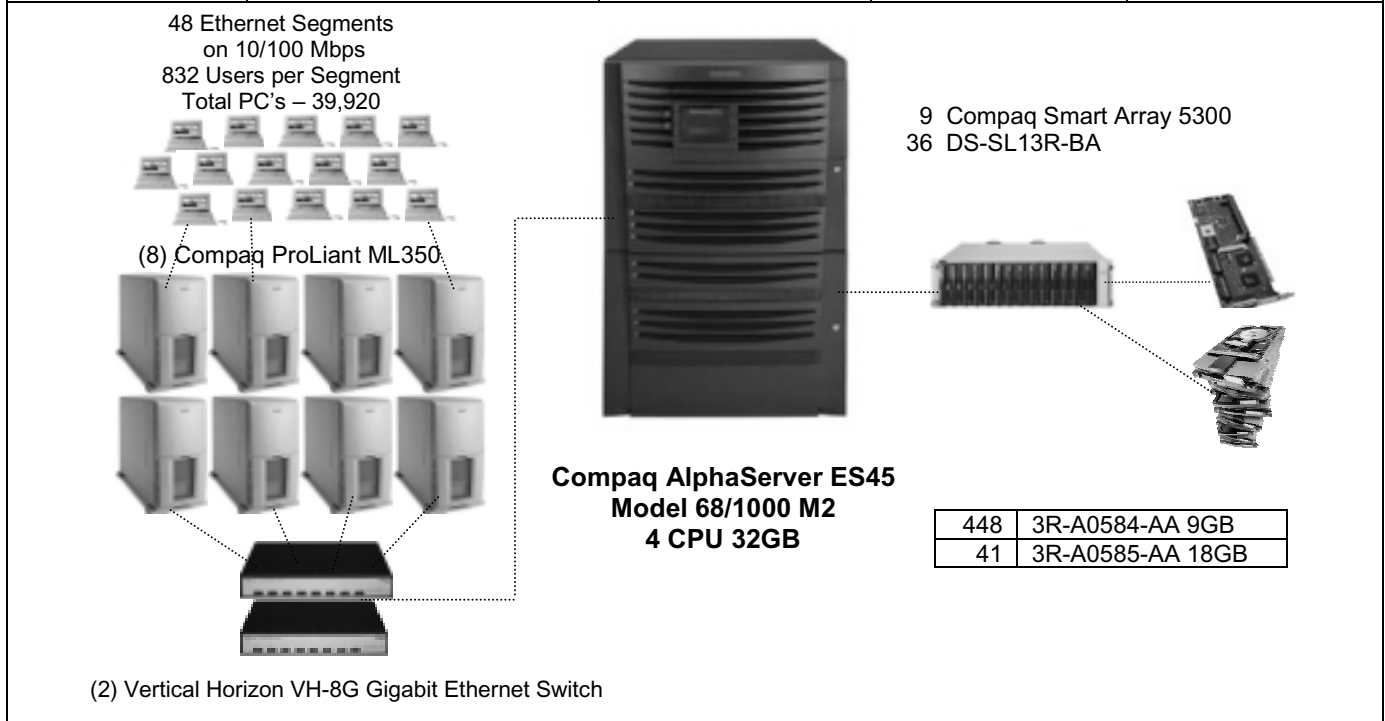


<b>COMPAQ</b> Inspiration Technology <b>ORACLE®</b>	<b>Compaq AlphaServer ES45</b> <b>4 CPU</b> <b>Client/Server System</b>	TPC-C Rev. 5
		Report Date: January 25, 2002

<b>Total System Cost</b>	<b>TPC-C Throughput</b>	<b>Price/Performance</b>	<b>Availability Date</b>
<b>\$763,829</b>	<b>50,117</b>	<b>\$15.24</b>	<b>May 9, 2002</b>

<b>Processors</b>	<b>Database</b>	<b>Operating System</b>	<b>Other Software</b>	<b>Number of Users</b>
(4) 1000 MHz Alphachip 21264C	Oracle9i, R2 Enterprise Edition for Tru64 UNIX	Compaq Tru64 UNIX V5.1A	BEA Tuxedo 6.5 CTS	39,920



	System Components		Client Components (Each of 8)	
	Qty	Type	Qty	Type
	Database Server, Compaq AlphaServer ES45		Compaq ProLiant ML350	
Processors	4	68/1000 MHz Alphachip 21264C	2	1GHz Intel Pentium III
Cache Memory	8	MB Cache	1	512KB Cache
Memory	4	8 GB Memory	1	128MB Memory
Total Memory	32	GB Memory	1	512MB Memory
Disk Controllers	9	Compaq Smart Array 5300		640MB Total Memory
Disks	448	9 GB Disks	1	18GB Disk
	41	18 GB Disks		
Total Disk Storage	4.8	TB		



**AlphaServer ES45  
M2  
4 CPU C/S System**

**TPC-C REV 5 EXECUTIVE SUMMARY  
PAGE 2 OF 2**

**Report Date: January 25, 2002**

Description	Part Number	Third Party Brand	Unit Price Pricing	Qty	Extended Price	3 yr. Maint. Price
<b>Server Hardware</b>						
Compaq AS ES45 68/1000 M2 4GB Unix	DA-68DAA-DA	1	54,718	1	54,718	17,896
ES45 Tower Enclosure	BA61M-CT	1	350	1	350	Inc.
ES45 68/1000 SMP CPU Unix	KN610-DB	1	11,200	3	33,600	Inc.
ES45 4GB Memory Option	MS620-DA	1	18,637	7	130,459	Inc.
PCI to GbE SX Adapter	DEGPA-SA	1	1,364	1	1,364	Inc.
Power Supply, Self Sensing	H7906-A9	1	875	2	1,750	Inc.
SmartArray 5304A/128 for Alpha	3X-KZPDC-DF	1	2,337	9	21,033	Inc.
Ultra 68VHD 10M Cable Assembly	BN37A-03	1	98	36	3,528	0
Star Lite Storage Shelf	DS-SL13R-BA	1	2,466	36	88,776	0
12/24gb 4MM Dat 5.25 Tape Drive	TLZ10-LB	1	478	1	478	862
9GB 10K U3 UNI HP HARD DRIVE **	3R-A0584-AA	1	223	493	109,939	Spared
18GB 10K U3 UNI HP HARD DRIVE **	3R-A0585-AA	1	265	46	12,190	Spared
VT510,WHITE,NORTH AMER,NO KEY	VT510-AA	1	427	1	427	0
US& Canada/English KB	PCXLA-NA	1	18	1	18	0
17-03212-05 8mp-8mp Patch Cable	BN25G-07	1	6	1	6	0
Vertical Horizon VH-8G Gigabit Ethernet Switch	VH-8G	2	5,246.25	4	20,985	
<b>Subtotal</b>					<b>479,621</b>	<b>18,758</b>
<b>Server Software</b>						
3YR, As ES40/45 Unix Brnz24x7	FM-E4WUS-36	1	1,896	1		1,896
3YR AS ES45 Unix SMP	FM-62USM-36	1	670	3		2,010
3YR Digital UNIX O/S & LP	FM-CDDST-36	1	6,765	1		6,765
Tru64 UNIX Alpha CDRM	QA-MT4AA-H8	1	315	1	315	
Oracle9i Enterprise Edition	Oracle	3	70,040	1	70,040	89,760
<b>Subtotal</b>					<b>70,355</b>	<b>100,431</b>
<b>Client Hardware</b>						
Compaq ProLiant ML350 1.0Ghz	160247-001	1	1,406	8	11,248	9,280
Pentium II P1000-256k Processor	207068-B21	1	725	8	5,800	Inc.
512MB SDRAMM DIMM Memory	128279-B21	1	454	8	3,632	Inc.
ProLiant ML350 Hot Plug Drive Cage	161275-B21	1	413	8	3,304	Inc.
18.2GB Wide Ultra 3 Drive	3R-A0585-AA	1	265	8	2,120	Inc.
Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Port 10/100	338456-B21	1	259	32	8,288	Inc.
Compaq NC3135 Fast Ethernet Module Dual 10/100 Upgrade for NC3134	338456-B22	1	207	24	4,968	Inc.
Gigabit Daughter CD Upgrade	338456-B23	1	517	8	4,136	Inc.
128MB SDRAM Dimm Memory Option	313615-B21	1	64	8	512	Inc.
SC-SC Dual FO Cbl, MM, PP, 4.5M	BN34B-4E	1	67	8	536	
V700 15" Monitor NH US	228114-001	1	148	10	1,480	Spared
<b>Subtotal</b>					<b>46,024</b>	<b>9,280</b>
<b>Client Software</b>						
BEA Tuxedo 6.5 Tier 1	BEA Tuxedo	4	2,850	8	22,800	16,560
<b>Subtotal</b>					<b>22,800</b>	<b>16,560</b>

Notes:\*\* 10% Spares

**Subtotal**  
**Three Year Cost of Ownership**

**\$618,800**  
**\$145,029**  
**\$763,829**

1=IC System Solutions, 2=Enterasys Networks, 3=Oracle, 4=BEA Tuxedo

tpmC Rating: 50,117

Audited by InfoSizing

\$ / tpmC: \$15.24

All prices are based on similar quantities and configurations.

Prices used in TPC benchmarks reflect the actual prices a customer would pay for a one-time purchase of the stated components. Individually negotiated discounts are not permitted. Special prices based on assumptions about past or future purchases are not permitted. All discounts reflect standard pricing policies for the listed components. For complete details, see the pricing sections of the TPC benchmark specifications. If you find that the stated prices are not available according to these terms, please inform the TPC at pricing@tpc.org. Thank you.

**AlphaServer ES45 Client/Server  
Numeric Quantities Summary**

**MQTH**

MQTH, computed Maximum Qualified Throughput	50117
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**Response Times** in seconds

Transaction	90th percentile	Average	Maximum
New-Order	0.463	0.298	6.508
Payment	0.584	0.371	11.348
Order-Status	0.455	0.296	6.389
Delivery (interactive)	0.198	0.198	5.386
Delivery (deferred)	0.375	0.212	5.422
Stock-Level	0.985	0.611	6.969
Menu	0.279	0.169	5.546

**Transaction Mix** in percent of total transactions

Transaction	Total Occurrences	Percentage
New-Order	7517575	44.978%
Payment	7188129	43.007%
Order-Status	669358	4.005%
Delivery (interactive)	669522	4.006%
Stock-Level	669194	4.004%

**Keying/Think Times** in seconds

Transaction	Minimum	Average	Maximum
New-Order	18.000/0.000	18.001/12.003	18.180/119.998
Payment	3.000/0.000	3.000/12.002	3.168/119.921
Order-Status	2.000/0.000	2.000/10.000	2.170/ 99.924
Delivery (interactive)	2.000/0.000	2.000/ 5.001	2.169/ 49.651
Stock-Level	2.000/0.000	2.000/ 5.002	2.169/ 49.741

**Emulation Delay** in seconds

Transaction	Response Time	Menu Response Time
New-Order	0.10	0.10
Payment	0.10	0.10
Order-Status	0.10	0.10
Delivery (interactive)	0.10	0.10
Stock-Level	0.10	0.10

**Test Duration**

Ramp up time	60 minutes
Measurement interval	150:00.00 minutes
Number of checkpoints	5
Checkpoint interval	29:25
Number of transactions (all types) completed in measurement interval	16713778